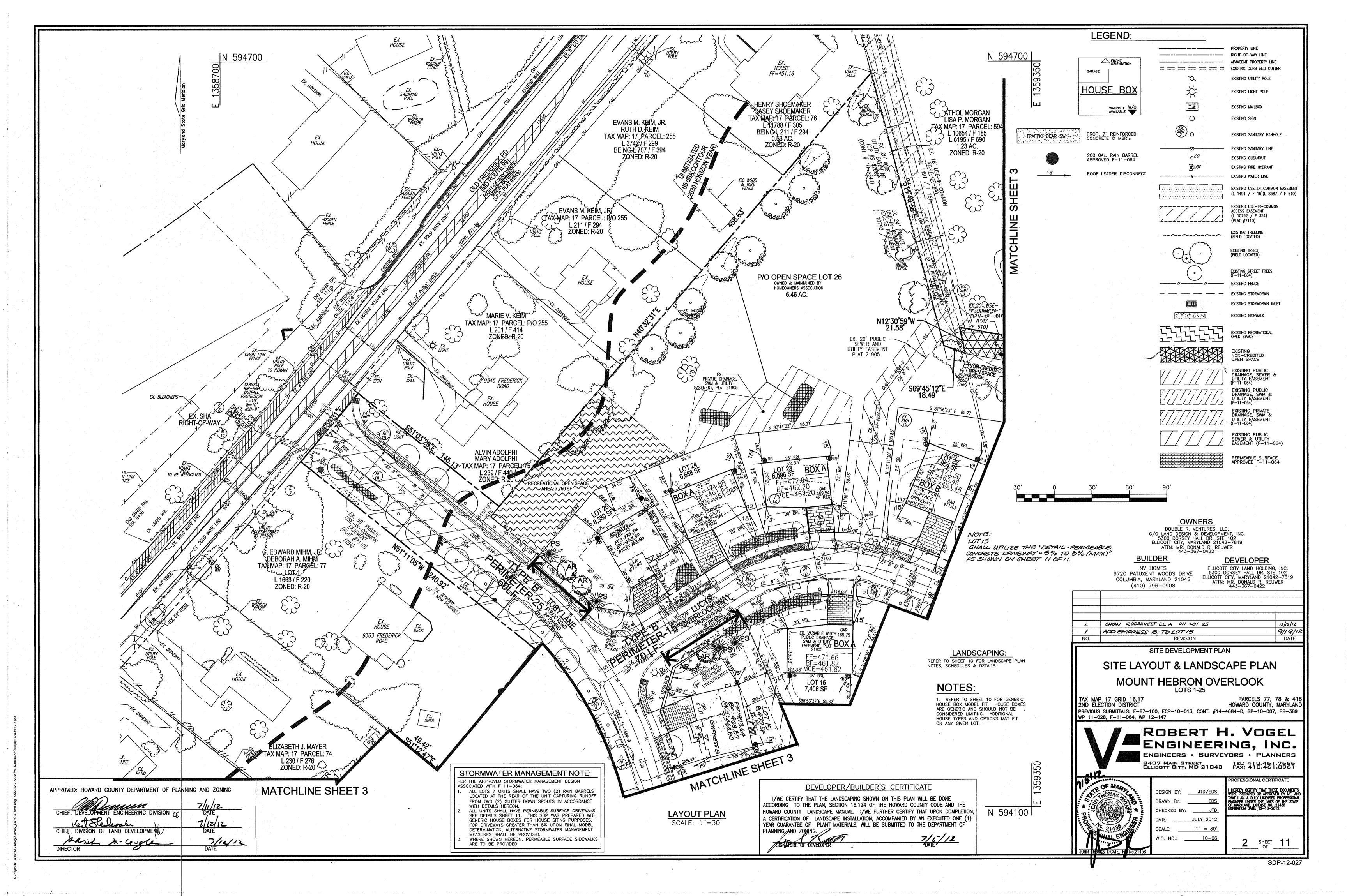
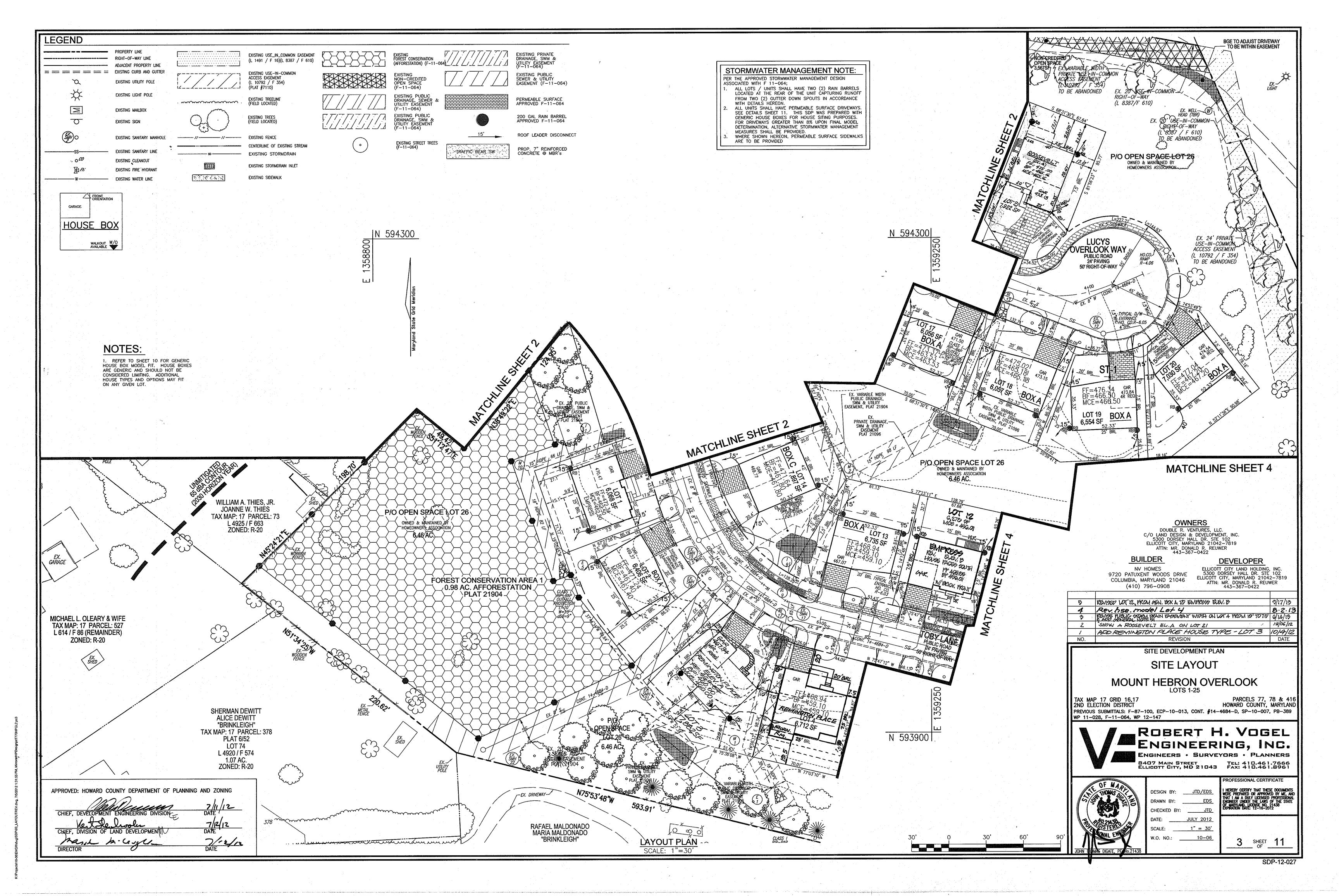
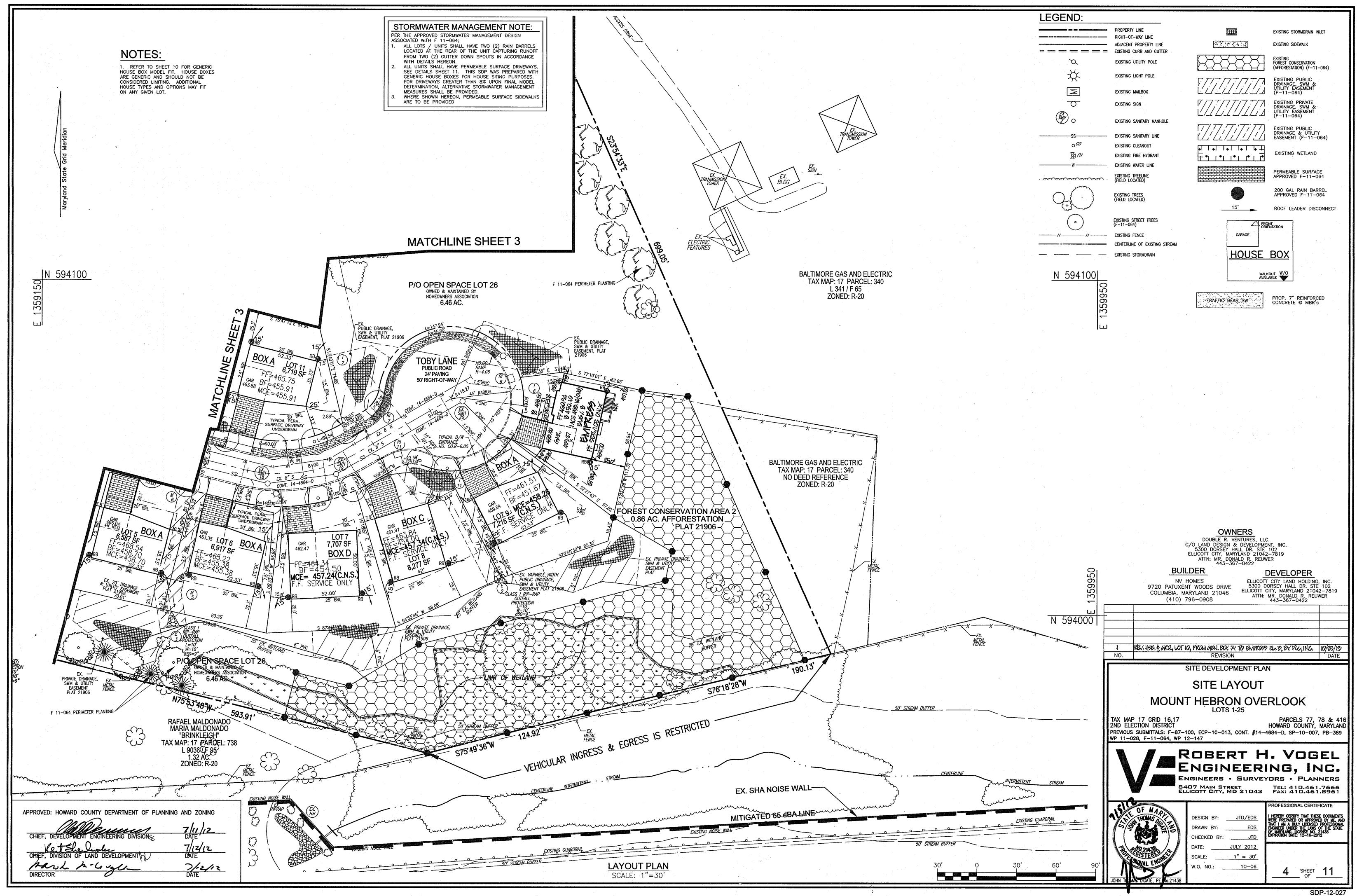
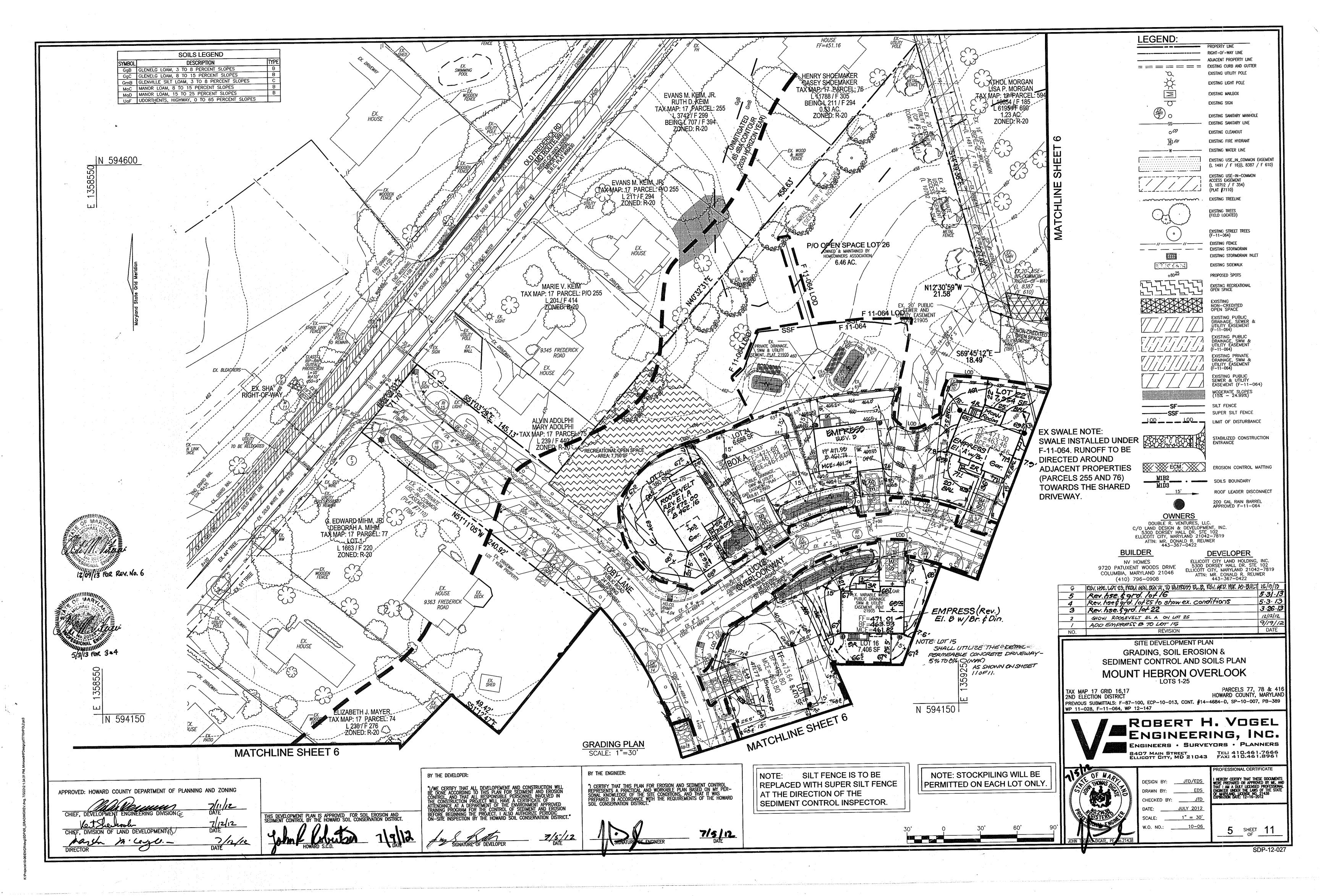
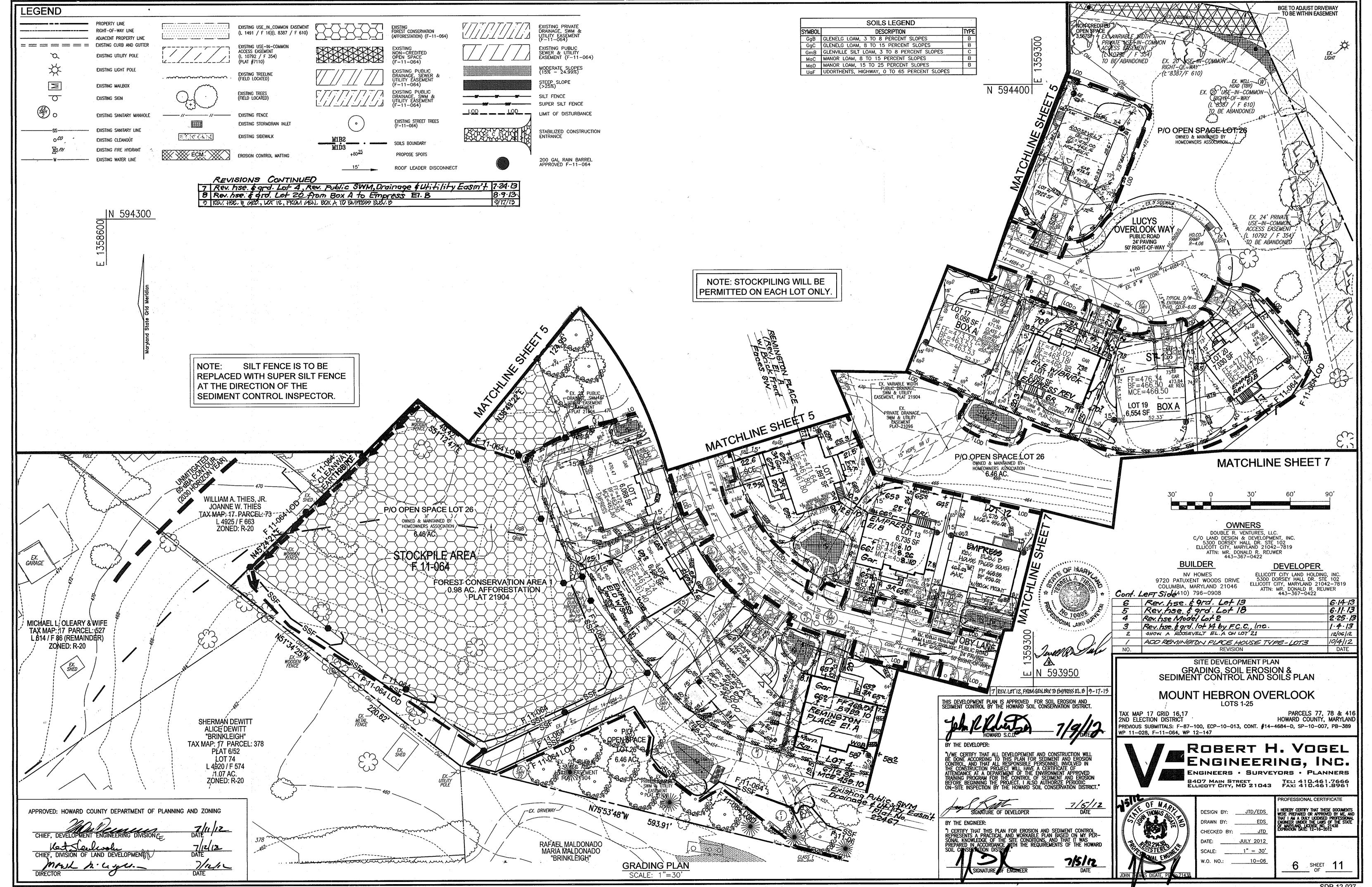
SITE DEVELOPMENT PLAN SHEET INDEX **GENERAL NOTES** SHEET NO DESCRIPTION THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK. COVER SHEET 2. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION MOUNT HEBRON OVERLOOK 2 SITE LAYOUT & LANDSCAPE PLAN 3. ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS 3 HAVE BEEN APPROVED. SITE LAYOUT PLAN 4. THE TOPOGRAPHY SHOWN HEREON IS BASED ON AN AERIAL TOPOGRAPHIC SURVEY PREPARED BY POTOMAC AERIAL 4 SITE LAYOUT PLAN SERVICES, INC. DATED MARCH 6TH 2010. 5. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON GRADING, SOIL EROSION AND SEDIMENT THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 17EA AND 17EB WERE USED FOR THIS LOTS 1-25 CONTROL AND SOILS PLAN 6. THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED GRADING, SOIL EROSION AND SEDIMENT THE SUBJECT PROPERTY IS ZONED "R-20" IN ACCORDANCE WITH THE 2/2/04 COMPREHENSIVE ZONING PLAN AND THE HOWARD COUNTY, MARYLAND COMP. LITE ZONING REGULATIONS EFFECTIVE ON 7/28/06. CONTROL AND SOILS PLAN 8. THIS R-20 ZONED SUBDIVISION IS BEING DEVELOPED PURSUANT TO SECTION 107.E OF THE R-ED ZONING DISTRICT INCLUDING THE PLANNING BOARD'S APPROVAL OF THE SUBDIVISION DESIGN, A 75' SETBACK FROM THE PROJECT GRADING. SOIL EROSION AND SEDIMENT ADJOINING SINGLE FAMILY DETACHED DEVELOPMENTS AND THE OTHER CRITERIA REQUIREMENTS IN ACCORDANCE WITH CONTROL AND SOILS PLAN SECTION 108.F.3. OF THE ZONING REGULATIONS. 9. IN ACCORDANCE WITH SECTION 108.F.2. OF THE ZONING REGULATIONS, THIS R-20 RECEIVING PARCEL SUBDIVISION N ASSOCIATION WITH NEIGHBORHOOD PRESERVATION IS RECEIVING 1 BONUS DENSITY UNIT UP TO 10% MORE DWELLING GRADING, SOIL EROSION AND SEDIMENT UNITS THAN WOULD BE ACHIEVABLE BASED ON THE NET DENSITY IN THE R-ED ZONING DISTRICT IF DEVELOPED AS SINGLE CONTROL PLAN - NOTES AND DETAILS FAMILY DWELLINGS USING THE R-ED REGULATIONS. 10. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. **VICINITY MAP** 9 DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE HOUSE TYPES TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION, OR BUILDING AND GRADING PERMITS. 10 SCALE: 1"=2000' GENERIC HOUSE BOXES AND LANDSCAPE 11. STORMWATER MANAGEMENT TO BE PROVIDED FOR THIS DEVELOPMENT BY ENVIRONMENTAL SITE DESIGN UTILIZING MICRO ADC MAP COORDINATE: PG. 4815 G3 NOTES & DETAILS BIO-RETENTION (F11-064), RAIN BARRELS, PERVIOUS DRIVEWAYS AND SIDEWALKS, AND ROOFTOP DISCONNECTS. THE MICRO-BIORETENTION FACILITIES ARE PRIVATELY OWNED AND MAINTAINED BY THE HOA. HOWARD COUNTY WILL ONLY MAINTAIN THE INLET STRUCTURE WITHIN THE MICRO-BIORETENTION FACILITIES ADJACENT TO THE RIGHT-OF-WAYS. ALL MISCELLANEOUS & STORMWATER MANAGEMENT **BENCHMARKS** PERMEABLE CONCRETE SIDEWALKS SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE HOA. REFER TO F 11-064. **INOTES & DETAILS** 2. EXISTING UTILITIES ARE BASED ON HOWARD COUNTY RECORDS, FIELD SURVEY, ROAD CONSTRUCTION PLANS AND HOWARD COUNTY BENCHMARK - 17EA (CONC. MONUMENT) AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS N 594357.62 E 1357519.37 NFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL LOCATION: FRONT OF MT. HEBRON H.S. NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. (ROUTE 99 AND ST. JOHN'S LA.) 13. ANY DAMAGE TO THE COUNTY'S RIGHTS-OF-WAY, PAVING, OR EXISTING UTILITIES SHALL BE CORRECTED AT THE HOWARD COUNTY BENCHMARK - 17EB (CONC. MONUMENT) LOCATION: ROUTE 99, 0.35 MILES WEST OF ST. JOHN'S LA N 593813.86 E 1355731.85 ELEV. 453.48 14. SHC ELEVATIONS ARE LOCATED AT THE PROPERTY LINE. 15. ALL DRIVEWAY ENTRANCES SHALL UTILIZE HOWARD COUNTY STANDARD DETAIL NO. R-6.03 MODIFIED FOR SIDEWALK LEGEND ADJACENT TO CURB. 16. THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING PROPERTY LINE 1-800-252-1133 BGE (CONSTRUCTION SERVICES) 410-637-8713 RIGHT-OF-WAY LINE 410-685-0123 BGE (EMERGENCY) ADJACENT PROPERTY LINE BUREAU OF UTILITIES 410-795-1390 COLONIAL PIPELINE CO 1-800-257-777 EXISTING UTILITY POLE MISS UTILITY STATE HIGHWAY ADMINISTRATION 410-531-5533 EXISTING LIGHT POLE 1-800-743-0033 THERE ARE EXISTING STRUCTURES LOCATED ON PARCELS 77, 78, AND 416. ALL EXISTING STRUCTURES LOCATED ON-SITE SHALL BE REMOVED PRIOR TO THE RECORDATION OF THIS PLAT. EXISTING MAILBOX 18. USING THE NEIGHBORHOOD PRESERVATION EXCHANGE OPTION DESCRIBED IN SECTION 128.L OF THE ZONING REGULATIONS, THE RIGHTS FOR 1 OF THE RESIDENTIAL LOTS SHOWN ON THE SUBDIVISION PLAN FOR MOUNT HEBRON OVERLOOK HAS BEEN EXISTING SIGN TRANSFERRED FROM PARCEL 594, TAX MAP 17, GRID 17, MORGAN PROPERTY - EX. 20' WIDE UTILITY 19. ALL STRUCTURES ARE REQUIRED TO BE SET BACK 75 FEET FROM PROJECT BOUNDARIES ADJOINING SINGLE-FAMILY EXISTING SANITARY MANHOLE DETACHED DEVELOPMENTS IN ACCORDANCE WITH SECTION 108.F.3.6 OF THE ZONING REGULATIONS. EXISTING SANITARY LINE 20. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR **EXISTING CLEANOUT** EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT EXISTING FIRE HYDRANT FRONT OR REAR YARD SETBACK. EXISTING WATER LINE 21. DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY EXISTING USE-IN-COMMON ROW (L 1491 / F 16)(L 8387 / F 610) VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS: A) WIDTH - 12 FEET (16 FEET IF SERVING MORE THAN ONE RESIDENCE) B) SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.); PERMEABLE SURFACE - 12" ASTM C-33 3/4" TO 2" STONE WITH 7" PERMEABLE CONCRETE ACCESS EASEMENT C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE, AND MINIMUM 45 FOOT D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD EVENTS WITH NO MORE EXISTING TREELINE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE EXISTING FENCE MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN CENTERLINE OF EXISTING STREAM LOT 22 THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR LOT 21 EXISTING STORMDRAIN LOT 23 EXISTING STORMDRAIN INLET 23. WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE. EXISTING SIDEWALK 24. WATER AND SEWER SERVICE FOR THIS PROJECT WILL BE PUBLIC. WATER WILL BE PROVIDED THROUGH CONTRACT NO. 71-W. SEWER WILL BE PROVIDED THROUGH CAPITAL PROJECT #S-6266. 25. PUBLIC WATER AND SEWER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME. PERMIT INFORMATION CHART PARCEL 77: L 12740 / F 20 LOTS/PARCEL # SECTION/AREA PARCEL 78: L 6195 / F 690 MOUNT HEBRON OVERLOOK 77, 78 & 146 PARCEL 416: L 8387 / F 610 LOTS 1 - 25 AND OPEN SPACE LOT 26 27. TO THE BEST OF THE OWNERS KNOWLEDGE, THÉRE ARE NO CEMETERIES OR GRAVE SITES LOCATED ON THE SUBJECT PLAT # OR L/F | BLOCK NO. | ZONE | TAX MAP No ELECT. DIST. CENSUS TR. LOT 16 PROPERTY. 28. TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THERE ARE NO HISTORIC STRUCTURES EXIST ON THIS SITE. 21903 - 21906 6021.00 16 & 17 THERE IS NO 100-YR FLOODPLAIN WITHIN THE LIMITS OF THIS PROJECT. LOT 19 LOT 20 FOREST STAND DELINEATION PLAN WAS PREPARED BY ROBERT H. VOGEL ENGINEERING INC., DATED MAY 2010. APPROVED * THE PROPERTY IS ZONED R-20 BUT WILL UTILIZE THE R-ED ZONING REGULATIONS PER SP-09-004 31. THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 PRO OPEN SPACE LOT 28 D. WARNEL F WIDTH PUBLIC DRAWNING, SMM & UTLITY EXSENDIT PLAT 21906 OPEN SPACE OF HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST LOT 14 LOT 26 CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION DOUBLE R. VENTURES, LLC FOREST CONSERVATION PLAN PREPARED BY ROBERT H. VOGEL ENGINEERING, INC. TOTAL FOREST CONSERVATION OBLIGATION OF THIS PROJECT WAS FULFILLED BY ON-SITE AFFORESTATION OF 1.84 C/O LAND DESIGN & DEVELOPMENT, INC. 5300 DORSEY HALL DR. STE 102 ELLICOTT CITY, MARYLAND 21042-7819 LOT 12 LOT 13 LOT 11 ACRES UNDER F 11-064. FINANCIAL SURETY IN THE AMOUNT OF \$40,075.50 WAS POSTED WITH F 11-064. ATTN: MR. DONALD R. REUWER 443-367-0422 34. WETLANDS SHOWN ON-SITE ARE BASED ON A FIELD INVESTIGATION PREPARED BY ECO-SCIENCE PROFESSIONALS, INC., DATED JUNE 02, 2010. THERE ARE NO PROPOSED DISTURBANCES TO THE WETLANDS OR ASSOCIATED BUFFERS. 35. A TRAFFIC STUDY WAS PREPARED BY THE TRAFFIC GROUP, INC., DATED JUNE 2010, APPROVED UNDER SP-10-007. **BUILDER** DEVELOPER 36. THE F 11-064 PLAN WAS PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LOT 10 LANDSCAPE MANUAL. A FINANCIAL SURETY IN THE AMOUNT OF \$16,200.00 WAS POSTED WITH F 11-064. ELLICOTT CITY LAND HOLDING, INC. 5300 DORSEY HALL DR. STE 102 NV HOMES 5300 DORSEY HALL DR. STE 102 ELLICOTT CITY, MARYLAND 21042-7819 PUBLIC STREET TREES WERE PROVIDED FOR THIS PROJECT IN ACCORDANCE WITH SECTION 16.124(e)(1) OF THE 9720 PATUXENT WOODS DRIVE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL UNDER F 11-064, FINANCIAL SURETY IN THE AMOUNT OF \$25,125.00 LOT 3 COLUMBIA, MARYLAND 21046 ATTN: MR. DONALD R. REUWER 443-367-0422 (410) 796-0908 38. OPEN SPACE LOT 26 TO BE OWNED AND MAINTAINED BY THE HOME OWNERS ASSOCIATION. SHERMAN DEWITT ALICE DEWITT 'BRINKLEIGH' TAX MAP: 17 PARCEL: 378 PLAT 6/52 LOT 74 L 4920/F 574 LOT 5 39. A NOISE STUDY WAS PREPARED BY ROBERT H. VOGEL ENGINEERING, INC. FOR MD ROUTE 99 AND APPROVED UNDER SP-10-007. AN EXISTING NOISE BARRIER IS PROVIDED ALONG INTERSTATE 70. 40. THIS PLAN IS SUBJECT TO PLANNING BOARD # PB 389 AND SP-10-007 APPROVED DECEMBER 2, 2010. 41. THIS PLAN IS SUBJECT TO A WAIVER TO SECTION 16.1205(a)(7) OF THE SUBDIVISION REGULATIONS FOR THE REMOVAL OF THE 39" SILVER MAPLE SPECIMEN TREE, APPROVED SEPTEMBER 14, 2010. 42. THIS PLAN IS SUBJECT TO A DESIGN MANUAL WAIVER TO APPENDIX A, VOLUME III TO REDUCE THE MINIMUM HORIZONTAL CURVE CURVE RADIUS FOR A PUBLIC ROAD, APPROVED SEPTEMBER 7, 2010. 43. A TOTAL OF 25 LOTS AND 1 OPEN SPACE LOT ARE PROPOSED UNDER THIS PLAN. THE LOTS HAVE BEEN CREATED BY A RE-SUBDIVISION OF THE "KEIM PROPERTY" LOT 2, AND A SUBDIVISION OF PARCELS 78 AND 416. REVISION 44. UNDER F-11-064, TEST PITS TO DETERMINE GROUND WATER AND ROCK ELEVATIONS WERE PERFORMED AT EACH FACILITY LOCATION. NO ROCK OR WATER ARE WITHIN 4' OF THE BOTTOM OF ANY FACILITY. SITE DEVELOPMENT PLAN 46. ALL SIDEWALKS NEAR MICRO BIO-RETENTION FACILITIES ARE TO BE TRAFFIC BEARING. SEE DETAIL SHEET 11. 47. ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON THE PLANS OR **COVER SHEET** 48. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$ 1,800 FOR THE REQUIRED 4 SHADE TREES AND 4 EVERGREEN TREES (SIDE YARD PERIMETERS OF LOTS 15 & 25) SHALL BE POSTED WITH THE BUILDING PERMITS FOR MOUNT HEBRON OVERLOOK LOTS 15 & 25. 49. THIS PLAN IS SUBJECT TO WP 12-147. THE PLANNING DIRECTOR APPROVED THE REQUEST TO WAIVE SECTION 16.156(g)(2) WHICH REQUIRES THE DEVELOPER TO PROVIDE INFORMATION WITHIN 45 DAYS OF RECEIVING THE REQUEST FROM THE SITE ANALYSIS DATA TAX MAP 17 GRID 16,17 2ND ELECTION DISTRICT SUBDIVISION REVIEW COMMITTEE, SUBJECT TO CONDITIONS. 1) THE WAIVER PETITION HOWARD COUNTY, MARYLAND NUMBER (WP12-147) AND ITS CONDITIONS OF APPROVAL MUST BE ADDED TO THE PREVIOUS SUBMITTALS: F-87-100, ECP-10-013, CONT. #14-4684-D, SP-10-007, PB-389 TOTAL PROJECT AREA: SITE DEVELOPMENT PLAN. 2) SDP 12-027 IS HEREBY REACTIVATED. THE REVISED 4.07 AC. AREA OF PLAN SUBMISSION WP 11-028, F-11-064, WP 12-147 **LOCATION MAP** SDP MUST BE SUBMITTED WITHIN 45 DAYS FROM THE WAIVER PETITION APPROVAL LIMIT OF DISTURBANCE: R-20, UTILIZING R-ED OPTION: PRESENT ZONING DESIGNATION: LETTER ON OR BEFORE MAY 18, 2012. PER SECTION 108.F.3. ROBERT H. VOGEL SCALE: 1"=100 ADDRESS CHART 50. SECTION 128.A.1.i OF THE ZONING REGULATIONS (CB-2-2012) WHICH PROPOSED USES FOR SITE AND ALLOWS SUNROOMS AND ROOM EXTENSIONS TO EXTEND NOT MORE THAN RESIDENTIAL, SINGLE FAMILY STRUCTURES: 10 FEET INTO THE REAR SETBACK ALONG NOT MORE THAN 60% OF THE ENGINEERING, INC. DETACHED (SFD) STREET ADDRESS STREET ADDRESS REAR FACE OF A DWELLING ON A LOT WHICH ADJOINS OPEN SPACE ALONG FLOOR SPACE ON EACH LEVEL A MAJORITY OF THE REAR LOT LINE FOR R-ED LOTS RECORDED AFTER THE OF BUILDING PER USE: 2615 TOBY LANE ENGINEERS . SURVEYORS . PLANNERS 2612 TOBY LANE 14 EFFECTIVE DATE OF CB-2-2012 (MAY 13, 2012) TOTAL NUMBER OF UNITS ALLOWED 25 BUILDABLE LOTS 51, PLAN SUBJECT TO WP-13-149. THE PLANNING DIRECTOR APPROVED ON APRIL 22, FOR PROJECT AS SHOWN ON FINAL PLAT: 15 2611 TOBY LANE 8407 MAIN STREET TEL: 410.461.7666 ELLICOTT CITY, MD 21043 FAX: 410.461.8961 2616 TOBY LANE 2013 A REQUEST TO WAIVE SECTION 16.119(3)(12) REQUIRING A PERPETUAL EASIMENT TOTAL NUMBER OF UNITS PROPOSED AT LEAST 20 FEET IN WIDTH FOR A PUBLIC STOKEN DRAIN OUTSIDE THE ROAD RIGHT-OF-WAY, ON SUBMISSION COORDINATE TABLE 9108 LUCYS OVERLOOK WAY 2620 TOBY LANE MAXIMUM NUMBER OF EMPLOYEES, 9112 LUCYS OVERLOOK WAY 2624 TOBY LANE POINT NORTHING EASTING POINT NORTHING EASTING TENANTS ON SITE PER USE: SAME OF MAD NUMBER OF PARKING SPACES REQUIRED 9116 LUCYS OVERLOOK WAY 2628 TOBY LANE BY HO.CO. ZONING REGULATIONS: JTD/EDS NUMBER OF PARKING SPACES PROVIDED 9120 LUCYS OVERLOOK WAY 2632 TOBY LANE APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 2 PFR SFD HOUSE 9124 LUCYS OVERLOOK WAY 6.46 AC (NON-CREDITED OPEN SPACE: 0.12 AC 2636 TOBY LANE OPEN SPACE ON SITE: CREDITED OPEN SPACE: 6.34 AC (50.0%) OF GROSS AREA 9117 LUCYS OVERLOOK WAY 2640 TOBY LANE AREA OF RECREATION OPEN SPACE CHECKED BY: 9113 LUCYS OVERLOOK WAY 300 SF/DWELLING UNIT x 25 = 7,500 SF REQUIRED 2644 TOBY LANE REQUIRED BY SUBDIVISION & LAND 7,750 SF REC OPEN SPACE PROVIDED: DEVELOPMENT REGULATIONS: 9109 LUCYS OVERLOOK WAY 2648 TOBY LANG BUILDING COVERAGE OF SITE: SCALE: F-87-100, ECP-10-013, CONT. #14-4684-D 9105 LUCYS OVERLOOK WAY 2627 TOBY LANE APPLICABLE DPZ FILE REFERENCES: SP-10-007, PB-389, F-11-064, WP-11-028, WP 12-147 9101 LUCYS OVERLOOK WAY 25 2623 TOBY LANG W.O. NO.: 10-06 ANY OTHER INFORMATION WHICH MAY SHEET 11 TAX MAP 17, GRID 16, PARCEL'S 77, 78, & 416 26 OPEN SPACE BE RELEVANT 2619 TOBY LANE FLOOR AREA RATIO: N/A

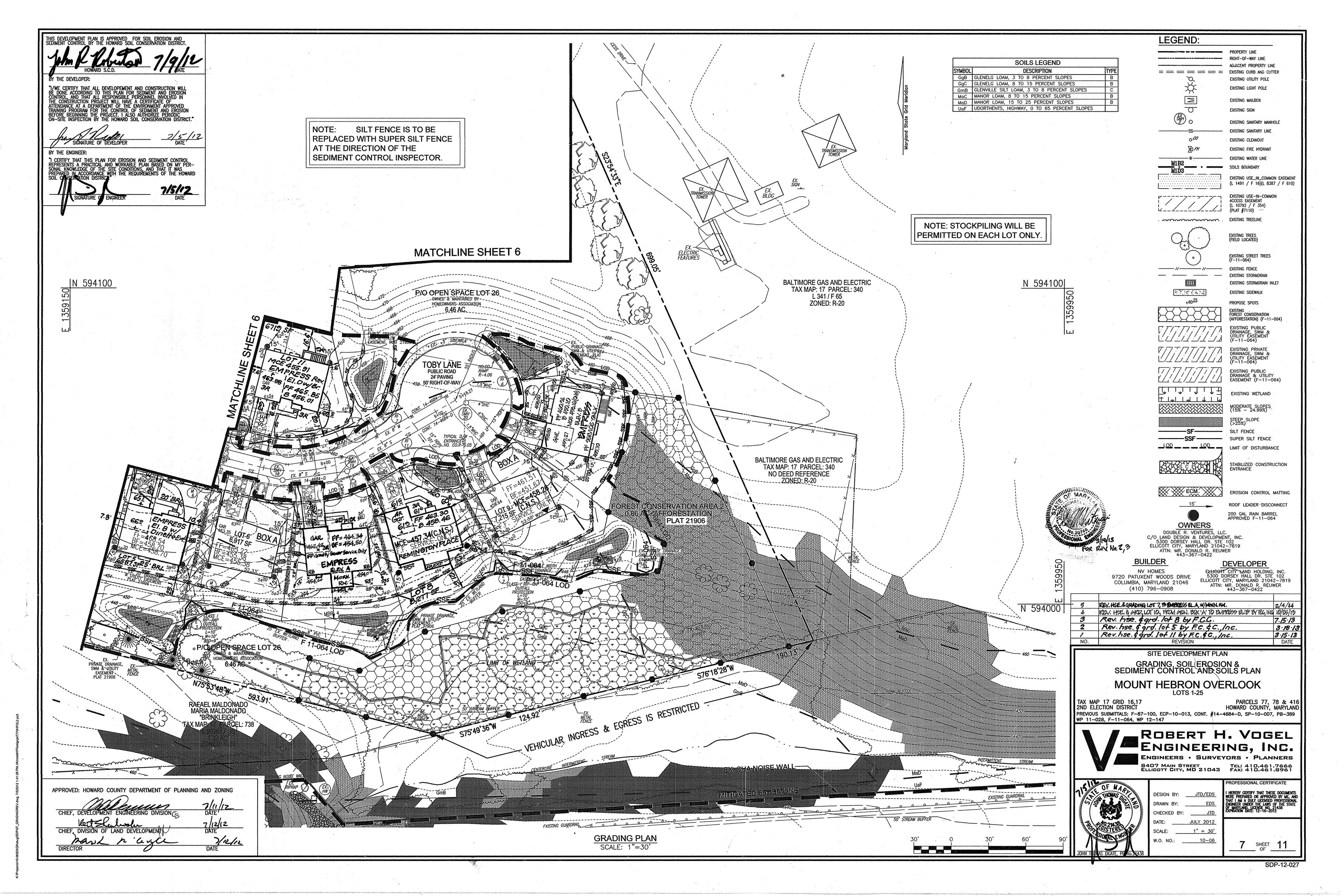












- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL",
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE,
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL (SECTION G) FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING. TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

TOTAL AREA OF SITE AREA DISTURBED

AND REVISIONS THERETO.

12.44 ACRES 6.34 ACRES AREA TO BE ROOFED OR PAVED __ ACRES 2.85 ACRES 3,700 CU. YDS.* AREA TO BE VEGETATIVELY STABILIZED TOTAL CUT 3.700 CU. YDS.* TOTAL FILL OFFSITE WASTE/BORROW AREA LOCATION F 11-064 **

ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER FARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION

TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

ESTIMATE ONLY; CONTRACTOR SHALL VERIFY QUANTITIES TO HIS OWN SATISFACTION ** TO BE DETERMINED BY CONTACTOR, WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, WITH AN APPROVED AND ACTIVE GRADING PERMIT

> HOWARD SOIL CONSERVATION DISTRICT PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED. SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

1) PREFERRED-APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/ 100 SQ.FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS./ 1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT THE TIME OF SEEDING, APPLY 400 LBS, PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ.FT.)

2) ACCEPTABLE-APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/ 1000 SQ.FT.) AND APPLY 1000 LBS. PER ACRE 10-10-10- FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS/1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.05 LBS./1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY:

OPTION (1) 2 TONS PER ACRE WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING.

OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

> HOWARD SOIL CONSERVATION DISTRICT TFMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT TERM VEGETATIVE COVER IS NEEDED.

LBS./1000 SQ.FT).

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED. SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 SQ.FT.). FOR THE PERIOD NOVEMBER 1 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

21.0 STANDARD AND SPECIFICATIONS **TOPSOIL**

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL CONDITIONS WHERE PRACTICE APPLIES

- I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO
 - THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT
 - THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
- II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE

CONSTRUCTION AND MATERIAL SPECIFICATIONS

SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

I. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS

II. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED. III. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY

DESCRIBED IN THE FOLLOWING PROCEDURES. II. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS. IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:

A. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL D. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED

NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL

(14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

II. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION —-SECTION I — VEGETATIVE STABILIZATION METHODS AND MATERIALS. V. TOPSOIL APPLICATION

I. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS

II. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" - 8" HIGHER IN ELEVATION.

III. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" - 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND THEAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE

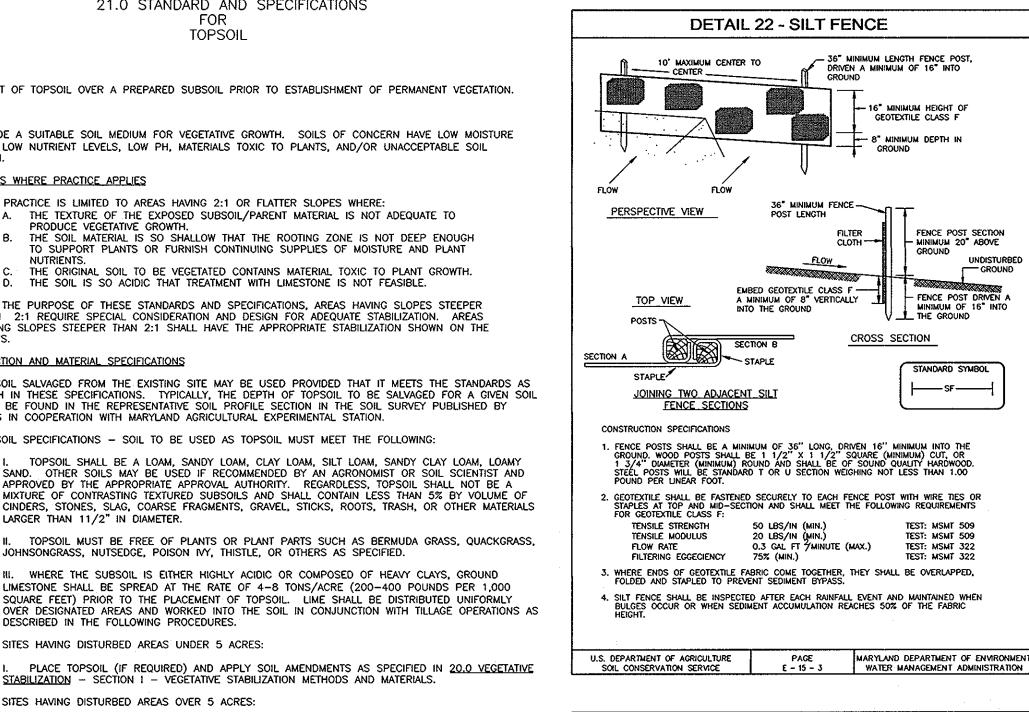
TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION. WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE

VI. ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW: COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06. B. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET,

COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4 LB./1.000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA, PUB.#1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.



DETAIL 33 - SUPER SILT FENCE

1. FENCING SHALL BE 42" IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE

2. CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES.

THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT

3. FILTER CLOTH SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED

5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED

7. FILTER CLOTH SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR

STAPLES AT TOP AND MID SECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR

50 LBS/IN (MIN.) 20 LBS/IN (MIN.)

PAGE

6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT BUILDUPS REMOVED WHEN "BULGES"

and state highway details for chain link fer

FOR A 6' FENCE SHALL BE USED, SUBSTITUTING 42" FABRIC AND 6' LENGTH

4. FILTER CLOTH SHALL BE EMBEDDED A MINIMUM OF 8" INTO THE GROUND.

DEVELOP IN THE SILT FENCE, OR WHEN SILT REACHES 50% OF FENCE HEIGHT

10' MAXIMUM

STANDARD SYMBOL

TEST: MSMT 509

TEST: MSMT 509

TEST: MSMT 322

MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION

SHALL NOT EXCEED 10' CENTER TO CENTER

FILTER CLOTH -

REQUIRED EXCEPT ON THE ENDS OF THE FENCE.

EMBED FILTER CLOTH 8"-

" IF MULTIPLE LAYERS ARE "REQUIRED TO ATTAIN 42"

BY 6" AND FOLDED.

GEOTEXTILE CLASS F:

TENSILE STRENGTH

TENSILE MODULUS

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT

AND PROVIDE THE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION

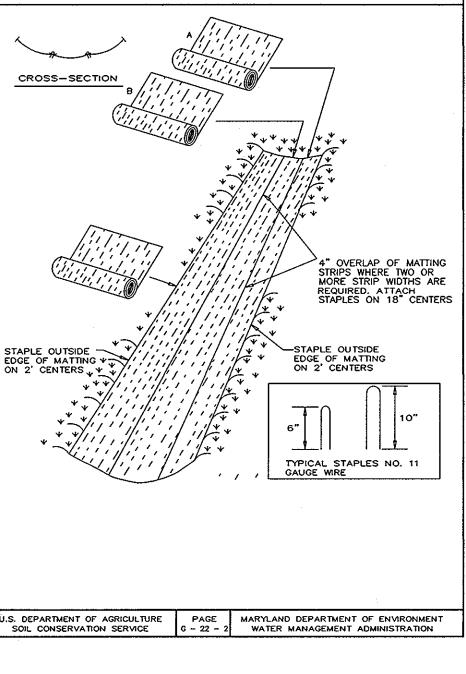
FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE PERMANENT OR

A. 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES,

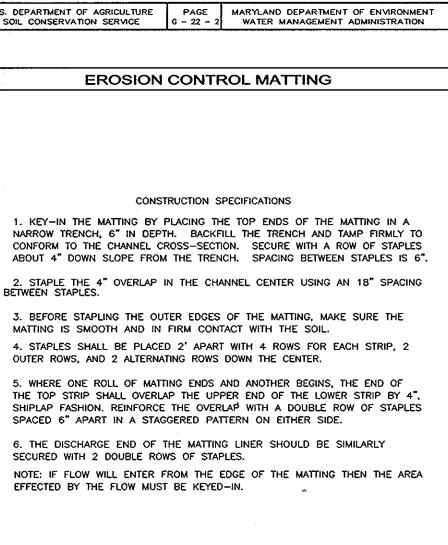
DIKES, SWALES, DITCH PERIMETER SLOPES SLOPES AND ALL SLOPES GREATER

FILTERING EFFICIENCY

CONSTRUCTION SPECIFICATIONS



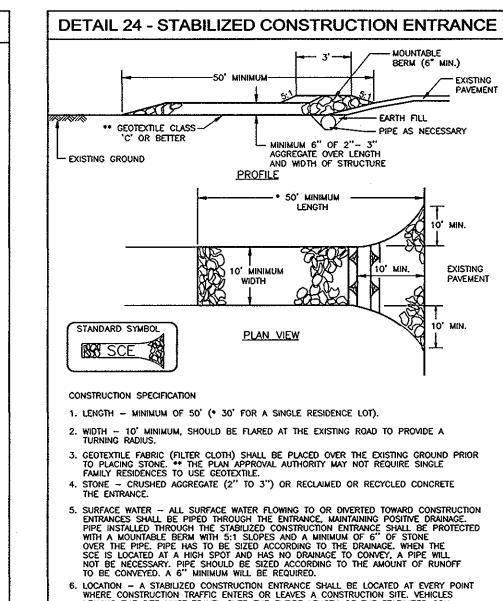
DETAIL 30 - EROSION CONTROL MATTING

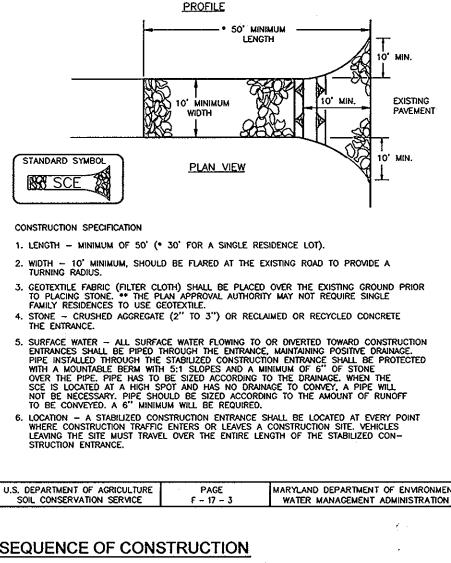


PAGE MARYLAND DEPARTMENT OF ENVIRONMENT

G - 22 - 2A WATER MANAGEMENT ADMINISTRATION

SOIL CONSERVATION SERVICE





2. NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS

(410-313-1880) AT LEAST 24 HOURS BEFORE STARTING ANY WORK. 3. IN ACCORDANCE WITH DETAILS, INSTALL SEDIMENT CONTROL MEASURES

AS SHOWN ON PLAN OR AS DIRECTED BY SEDIMENT CONTROL INSPECTOR

DRY UTILITIES (CABLE, GAS ELECTRIC) MUST BE INSTALLED AFTER ROAD CONSTRUCTION AND PRIOR TO THE INSTALLATION OF THE F 11-064

INSPECTOR TO PROCEED, ROUGH GRADE SITE FOR HOUSE CONSTRUCTION. CONSTRUCT HOUSES. THE FIRST FLOOR ELEVATIONS CANNOT BE MORE

AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL

THAN 1' HIGHER OR 0.2' LOWER THAN THE ELEVATIONS SHOWN ON FINE GRADE LOT AS DETAILED HEREIN AND PER SPOT ELEVATIONS SHOWN

AND RAIN BARRELS WHERE SHOWN ON SHEETS 2-4 AND IN ACCORDANCE WITH DETAILS ON SHEET 11.

ONCE FINAL GRADING AND STABILIZATION IS COMPLETE INSTALL PERVIOUS CONCRETE DRIVEWAYS AND SIDEWALKS IN ACCORDANCE WITH APPENDIX B.4, UNDERDRAINS AND CONCRETE. CONTAMINATED (DIRT) SUBBASE SHALL BE REMOVED AND BOTTOM OF EXCAVATION SHALL BE SCARIFIED TO PROMOTE INFILTRATION.

UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE.

TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON AND OFF-SITE DAMAGE, HEALTH HAZARDS, AND IMPROVE TRAFFIC CONDITIONS WHERE PRACTICE APPLIES THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENTS WHERE ON AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT. <u>SPECIFICATIONS</u> TEMPORARY METHODS: . MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING. 2. VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER 3. TILLAGE — TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS an emergency measure which should be used before soil blowing starts. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 2" APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT. 4. IRRIGATION — THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THAT RUNOFF BEGINS TO . BARRIERS - SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN 6. CALCIUM CHLORIDE — APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT. 1. PERMANENT VEGETATION — SEE STANDARDS FOR PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOD. EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE. 2. TOPSOILING - COVERING WITH LESS EROSIVE SOIL MATERIALS. SEE STANDARDS

30.0 DUST CONTROL

CONTROLLING DUST BLOWING AND MOVEMENT ON CONSTRUCTION SITES AND ROADS.

3. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

(2 WEEKS)

(6 MONTHS) COMMON TO ROOFTOP DISCONNECTIONS. INSTALL ROOF GUTTER DOWNSPOUTS

(2 DAYS)

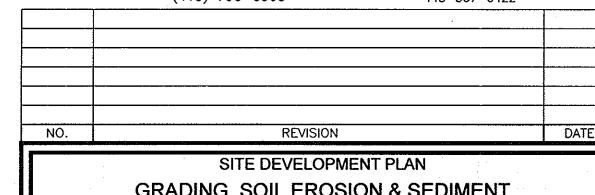
(2 DAYS)

OWNERS DOUBLE R. VENTURES, C/O LAND DESIGN & DEVELOPMENT, INC. 5300 DORSEY HALL DR. STE 102 ELLICOTT CITY, MARYLAND 21042-7819 ATTN: MR. DONALD R. REUWER 443-367-0422

BUILDER

DEVELOPER ELLICOTT CITY LAND HOLDING.

NV HOMES 5300 DORSEY HALL DR. STE 9720 PATUXENT WOODS DRIVE ELLICOTT CITY, MARYLAND 21042-7819 COLUMBIA, MARYLAND 21046 (410) 796-0908



GRADING. SOIL EROSION & SEDIMENT CONTROL PLAN - NOTES & DETAILS MOUNT HEBRON OVERLOOK

TAX MAP 17 GRID 16,17

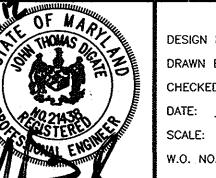
2ND ELECTION DISTRICT WP 11-028, F-11-064, WP 12-147

PARCELS 77, 78 & 416 HOWARD COUNTY, MARYLAND PREVIOUS SUBMITTALS: F-87-100, ECP-10-013, CONT. #14-4684-D, SP-10-007, PB-389



Robert H. Vogel ENGINEERING, INC Engineers • Surveyors • Planners

8407 MAIN STREET TEL: 410.461.7666 ELLICOTT CITY, MD 21043 FAX: 410.461.8961



DESIGN BY: CHECKED BY: JTD I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21438 SHEET 17

SDP-12-027

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

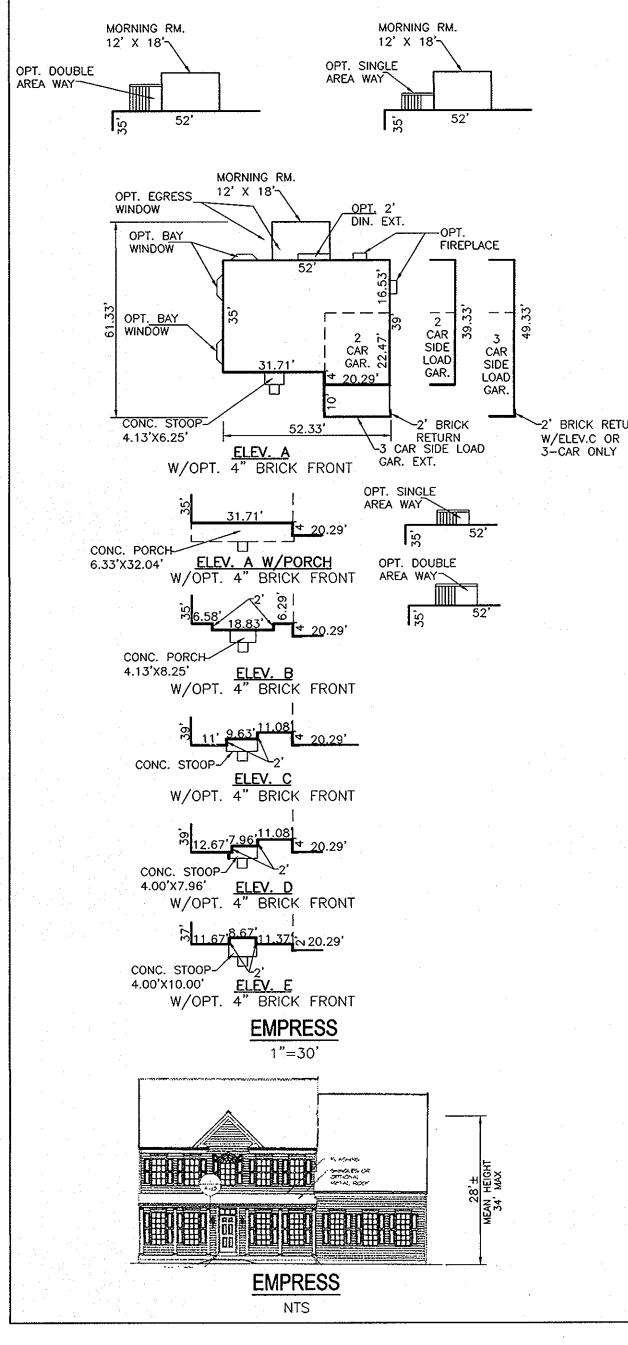
BY THE DEVELOPER: BY THE ENGINEER:

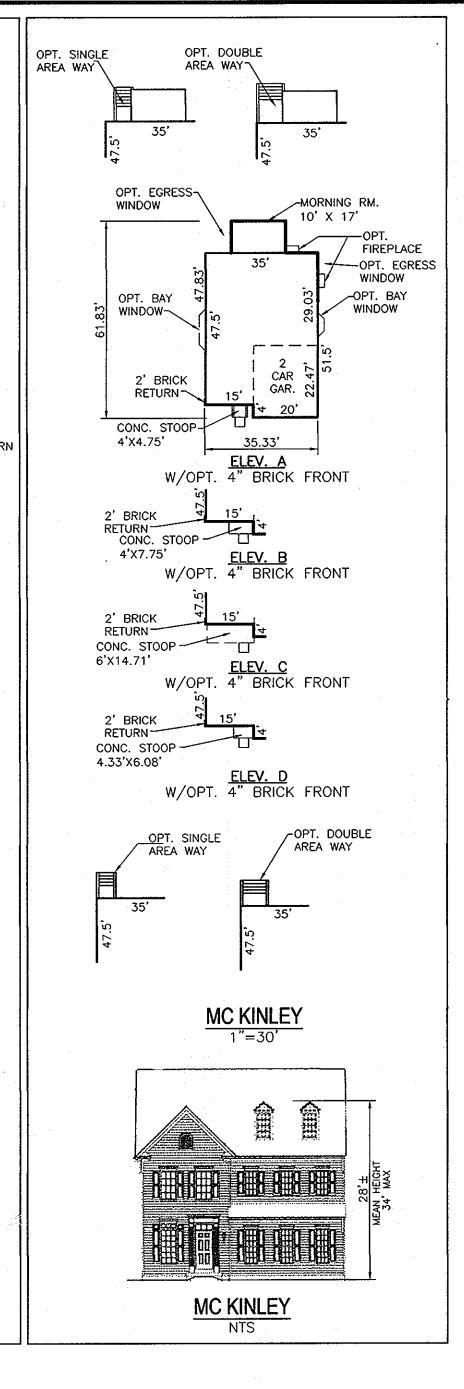
CONTROL MEASURES SHOWN HEREON.

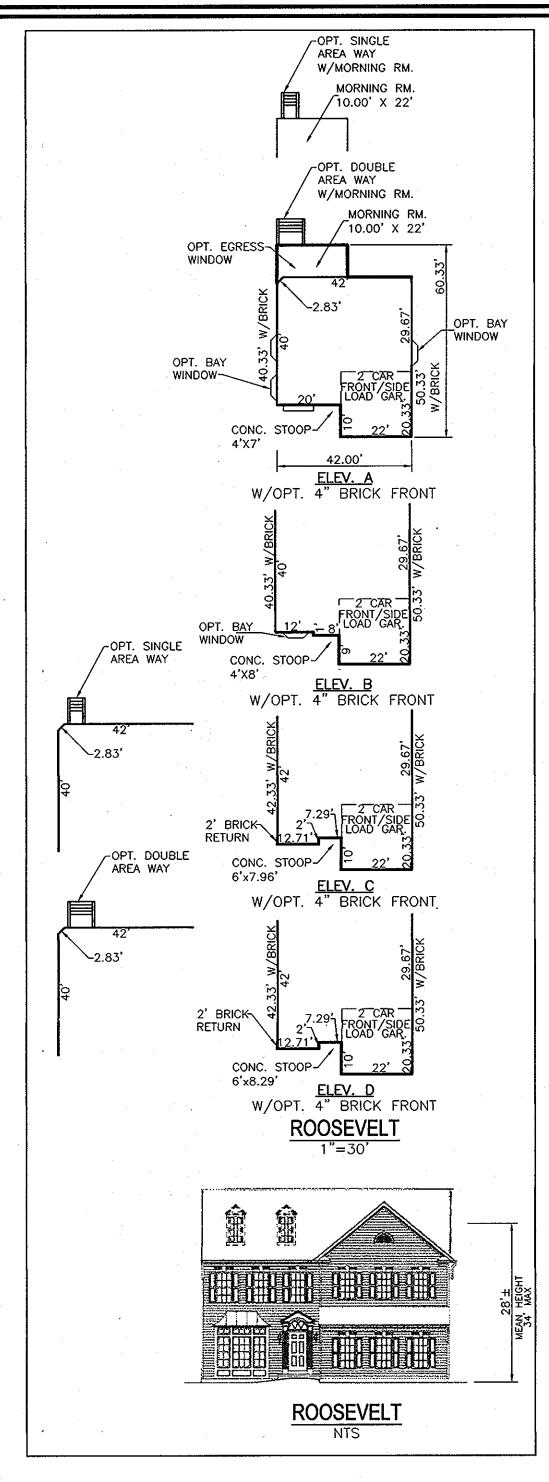
TEMPORARY STABILIZATION SHALL BE COMPLIED WITH:

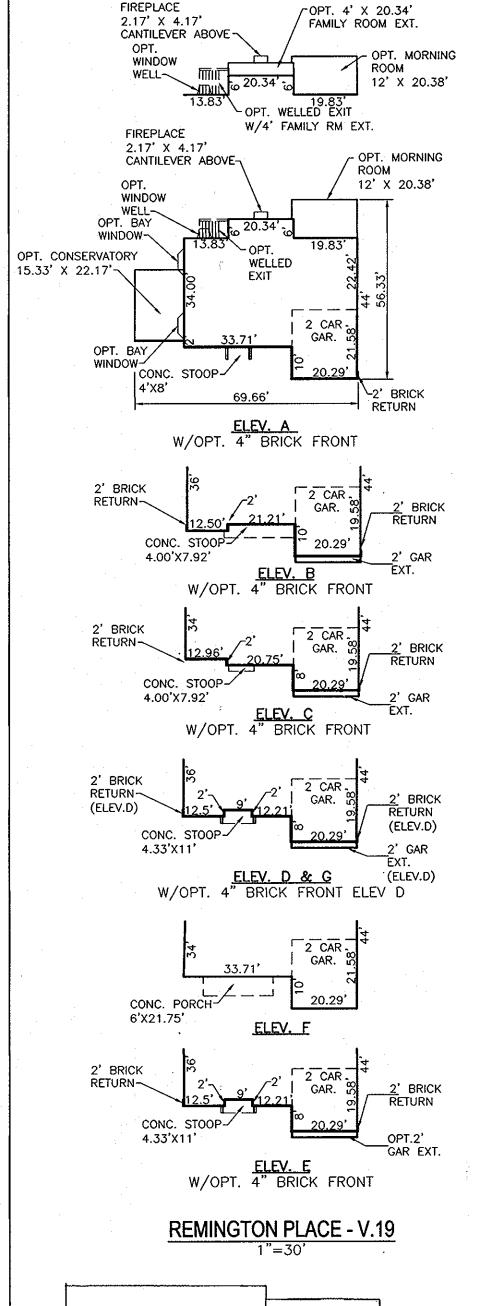
B. 14 CALENDAR DAYS FOR ALL OTHER DISTURBED AREAS.

7/5/12

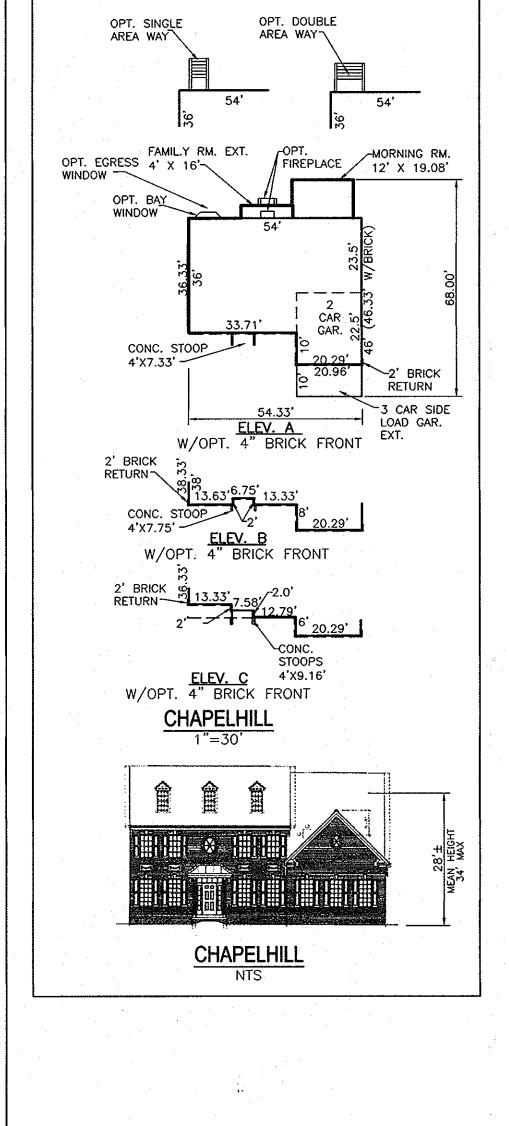








FIREPLACE



OWNERS DOUBLE R. VENTURES, LLC. C/O LAND DESIGN & DEVELOPMENT, INC. 5300 DORSEY HALL DR. STE 102 ELLICOTT CITY, MARYLAND 21042-7819 ATTN: MR. DONALD R. REUWER 443-367-0422

DEVELOPER ELLICOTT CITY LAND HOLDING, INC. 5300 DORSEY HALL DR. STE 102 ELLICOTT CITY, MARYLAND 21042-7819 ATTN: MR. DONALD R. REUWER 443-367-0422 NV HOMES 9720 PATUXENT WOODS DRIVE COLUMBIA, MARYLAND 21046

(410) 796-0908 DATE

SITE DEVELOPMENT PLAN HOUSE TYPES LANDSCAPE NOTES & DETAILS MOUNT HEBRON OVERLOOK

LOTS 1-25 PARCELS 77, 78 & 416 TAX MAP 17 GRID 16,17 HOWARD COUNTY, MARYLAND 2ND ELECTION DISTRICT PREVIOUS SUBMITTALS: F-87-100, ECP-10-013, CONT. #14-4684-D, SP-10-007, PB-389

WP 11-028, F-11-064, WP 12-147 ROBERT H. VOGEL ENGINEERING, INC.

Engineers • Surveyors • Planners 8407 MAIN STREET TEL: 42 0.461.7666 ELLICOTT CITY, MD 21043 FAX: 410.461.8961

DESIGN BY: CHECKED BY: SCALE: ____AS SHOWN

W.O. NO.:

SHEET 11

TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL. PLANTINGS SHOWN HEREON ARE THE RESPONSIBILITY OF THE BUILDER TO INSTALL DURING THE CONSTRICTION OF THE HOME ON LOT 15 & 25 LANDSCAPE SCHEDULE SIZE REMARKS KEY QUAN. BOTANICAL NAME ACER RUBRUM 1/2"-3" CAL. B & B OCTOBER GLORY RED MAPLE PINUS STROBUS 6'-8' HT. B & B EASTERN WHITE PINE

THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE

MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND

FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH

PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT

WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD

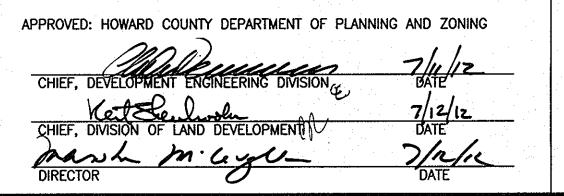
CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

SHOULD ANY TREE DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPING CREDIT IS GIVEN. DIE PRIOR TO RELEASE OF BONDS. THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE

EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD, AND GROWTH CHARACTERISTICS. THE REPLACEMENT

LANDSCAPE NOTES

SCHEDULE A: PERIMETER LANDSCAPE EDGE						
CATEGORY	ADJACENT TO PERIMETER PROPERTIES/ROADWAYS					
PERIMETER/FRONTAGE DESIGNATION LANDSCAPE TYPE	15 B	25 B				
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	60'	70'				
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO				
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	МО	ИО				
NUMBER OF PLANTS REQUIRED(LF REMAINING) SHADE TREES EVERGREEN TREES SHRUBS	60' 1:50 2 1:40 2	70' 1:50 2 1:40 2				
NUMBER OF PLANTS PROVIDED SHADE TREES EVERGREEN TREES EVERGREEN TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	2 2 - -	2 2 - -				



LANDSCAPE SCHEDULE NOTE:

ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL,

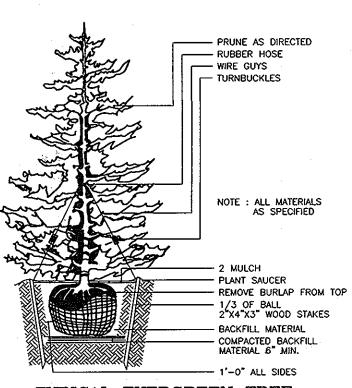
- CONFORM TO THE MOST CURRENT AAN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH HRD PLANTING SPECIFICATIONS. 2. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING. 3. FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS.
- TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES. 4. CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING, IF PLAN DIFFERS FROM
- LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

GENERAL NOTES: 1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$ 1,800 FOR THE REQUIRED 4 SHADE TREES AND 4 EVERGREEN TREES SHALL BE POSTED WITH THE BUILDING PERMIT FOR LOTS 15 & 25.

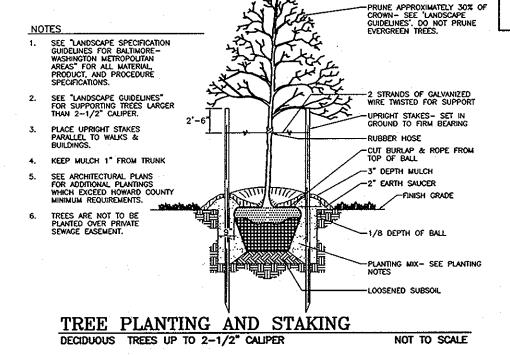
2. PUBLIC STREET TREES WERE PROVIDED FOR THIS PROJECT IN ACCORDANCE WITH SECTION 16.124(e)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL UNDER F 11-064 3. THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

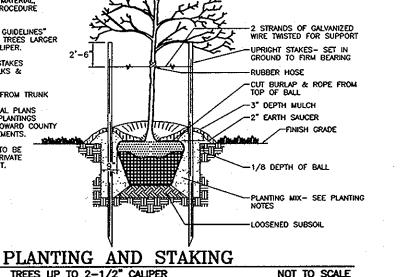
4. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS LISTED HEREWITH AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.

- 5. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE BE PERMITTED WITHIN THE WETLANDS, WETLANDS BUFFER, STREAM BANK BUFFER OR FOREST CONSERVATION EASEMENTS.
- 6. THE REMOVAL OF TREES 30" OR CREAT DHB IS PROHIBITED WITH OUT COUNTY APPROVAL. 7. THIS PLAN IS SUBJECT TO A WAIVER TO SECTION 16.1205(a)(7) OF THE SUBDIVISION REGULATIONS FOR THE REMOVAL OF THE 39" SILVER MAPLE SPECIMEN TREE, APPROVED SEPTEMBER 14, 2010.



TYPICAL EVERGREEN TREE PLANTING DETAIL NOT TO SCALE





DEVELOPER/BUILDER'S CERTIFICATE

REMINGTON PLACE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING/AND ZONING.

BOX A

FITS: **EMPRESS**

ELEV A W/ BRICK - NO MORN. RM - NO ELEV B, C, D, E NO 3 CAR SIDE LOAD GARAGE

NO CHAPEL HILL NO REMINGTON PLACE NO MCKINLEY

NO ROOSEVELT

BOX B ∇

FITS: MCKINLEY ALL ELEV

- NO REAR FP NO MORN. RM ROOSEVELT

ELEV A & B - NO MORN. RM - NO EGRESS WINDOW ELEV C & D - NO MORN. RM NO BRICK NO FP - NO EGRESS WINDOW

NO CHAPEL HILL NO REMINGTON PLACE NO EMPRESS

42' BOX C ∇

FITS: ROOSEVELT

- NO MORN. RM NO FP - NO EGRESS WINDOW ELEV B, C & D - NO MORN. RM NO BRICK - NO FP

 NO EGRESS WINDOW NO CHAPEL HILL NO REMINGTON PLACE NO EMPRESS NO MCKINLEY

BOX D ∇

FITS: ROOSEVELT

ALL ELEV - NO MORN. RM NO BRICK NO FP NO EGRESS WINDOW

EMPRESS

ALL ELEV
- NO 12 X 18 MORN. RM

NO CHAPEL HILL NO REMINGTON PLACE NO MCKINLEY

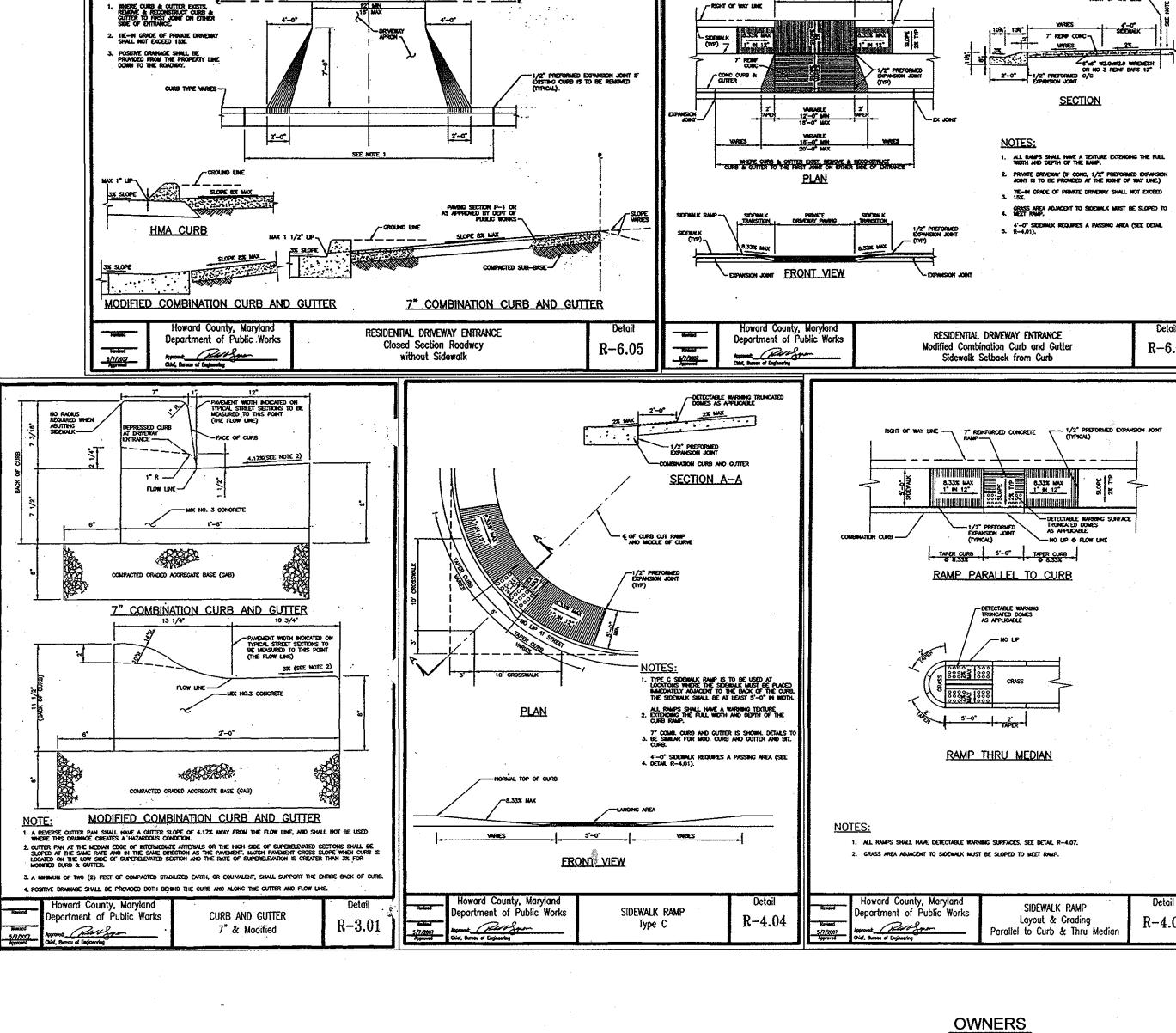
NOTE:

1. GENERIC HOUSE BOX MODEL FIT SHOWN HEREON

2. HOUSE BOXES ARE GENERIC AND SHOULD NOT BE CONSIDERED LIMITING. ADDITIONAL HOUSE TYPES AND OPTIONS MAY FIT ON ANY GIVEN LOT.

3. SECTION 128.A.1.i OF THE ZONING REGULATIONS (CB-2-2012) WHICH ALLOWS SUNROOMS AND ROOM. EXTENSIONS TO EXTEND NOT MORE THAN 10 FEET INTO THE REAR SETBACK ALONG NOT MORE THAN 60% OF THE REAR FACE OF A DWELLING ON A LOT WHICH ADJOINS OPEN SPACE ALONG A MAJORITY OF THE REAR LOT LINE FOR R-ED LOTS RECORDED AFTER THE EFFECTIVE DATE OF CB-2-2012 (MAY 13, 2012).

> 4. MODELS CHOSEN WHICH DO NOT FIT IN THE ABOVE GENERIC BOX, HOWEVER DO FIT ON INDIVIDUAL LOTS, SHALL UTILIZE THE HOWARD COUNTY DPZ WALK THRU "HOUSE TYPE REVISION" PROCESS.



DOUBLE R. VENTURES, LLC C/O LAND DESIGN & DEVELOPMENT, INC. 5300 DORSEY HALL DR. STE 102 ELLICOTT CITY, MARYLAND 21042-7819 ATTN: MR. DONALD R. REUWER 443-367-0422

BUILDER NV HOMES 9720 PATUXENT WOODS DRIVE COLUMBIA, MARYLAND 21046 (410) 796-0908

DEVELOPER ELLICOTT CITY LAND HOLDING, INC. 5300 DORSEY HALL DR. STE 102 ELLICOTT CITY, MARYLAND 21042-7819 ATTN: MR. DONALD R. REUWER 443-367-0422

R-4.06

DATE

SITE DEVELOPMENT PLAN **GENERIC HOUSE BOXES**

REVISION

MOUNT HEBRON OVERLOOK LOTS 1-25

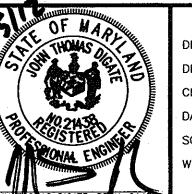
TAX MAP 17 GRID 16,17 2ND ELECTION DISTRICT

PARCELS 77, 78 & 416 HOWARD COUNTY, MARYLAND PREVIOUS SUBMITTALS: F-87-100, ECP-10-013, CONT. #14-4684-D, SP-10-007, PB-389 WP 11-028, F-11-064, WP 12-147



ROBERT H. VOGEL ENGINEERING, INC. ENGINEERS . SURVEYORS . PLANNERS

8407 MAIN STREET TEL: 410.461.7666 ELLICOTT CITY, MD 21043 FAX: 410.461.8961

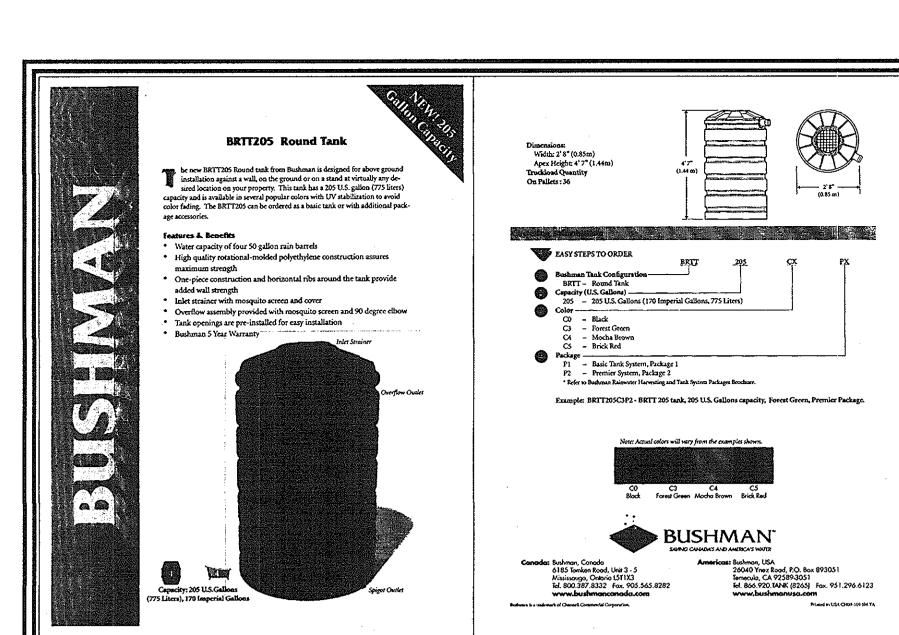


____JTD CHECKED BY: 10-06

10 SHEET 11

SDP-12-027

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING



BUSHMAN BRTT205 (205 GALLON) RAIN HARVESTING SYSTEM OR EQUIVALENT RAIN BARREL DETAIL NOT TO SCALE

TYPICAL RAIN BARREL DESIGN

7.48 GAL/CUFT

500 SF X (X")

= 27.41 CUFT

= 27.41 CUFT

HOWARD COUNTY - OPERATION AND MAINTENANCE SCHEDULE FOR

PRIVATELY OWNED AND MAINTAINED RAINWATER HARVESTING (M-1)

CLEAN BARREL WITH A HOSE.

- THE OWNER SHALL VERIFY INTEGRITY OF LEAF SCREENS, GUTTERS, DOWNSPOUTS, SPIGOTS, AND MOSQUITO SCREENS, AND CLEAN AND
- REMOVE ANY DEBRIS. THE OWNER SHALL REPLACE DAMAGED COMPONENTS AS NEEDED.

THE OWNER SHALL EMPTY BARRELS ON A MONTHLY BASIS AND

THE OWNER SHALL DISCONNECT THE BARREL PRIOR TO WINTER, OR ALLOW THE BARREL TO DRAIN BY BOTTOM SPIGOT DURING

IOPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED PERMEABLE PAVEMENT (A-2)]

- The Owner shall periodically sweep (or vacuum porous concrete pavement) the pavement surfaces to reduce sediment accumulation and ensure continued surface porosity. Sweeping should be performed at least twice annually with a commercial cleaning unit. Washing or compressed air units should not be used to perform surface cleaning.
- The Owner shall periodically clean drainage pipes, inlets, stone edge drains and other structures within or draining to the subbase
- The Owner shall use deicers in moderation. Deicers should be non-toxic and be applied either as calcium magnesium acetate or as pretreated salt.
- The Owner shall ensure snow plowing is performed carefully with blades set oneinch above the surface. Plowed snow piles and snowmelt should not be directed to permeable pavement.

[OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED Rainwater Harvesting (M-1)]

- a. The Owner shall empty barrels on a monthly basis and clean barrel with a hose.
- The Owner shall verify integrity of leaf screens, gutters, downspouts, spigots, and mosquito screens, and clean and remove any debris.
- The Owner shall replace damaged components as needed.
- The Owner shall disconnect the barrel prior to winter, or allow the barrel to drain by bottom spigot during the winter season.

A service of the company of the comp [OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF ROOFTOP RUNOFF (N-1). DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)]

Maintenance of areas receiving disconnected runoff is generally no different than that required for other lawn or landscaped areas. The Owner shall ensure the areas receiving runoff are protected from future compaction or development of impervious area. In commercial areas, foot traffic should be discouraged as well.

B.4.B SPECIFICATIONS FOR PERMEABLE PAVEMENTS & REINFORCED TURF

1. PERVIOUS CONCRETE SPECIFICATIONS

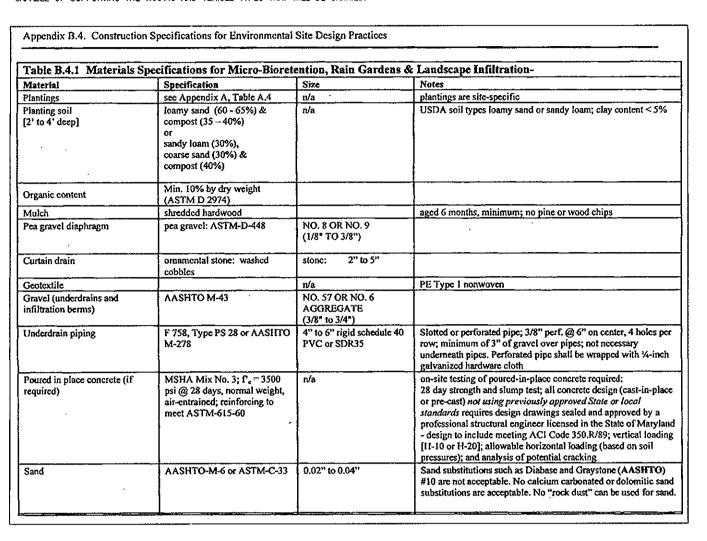
THESE SPECIFICATIONS INCLUDE INFORMATION ON ACCEPTABLE MATERIALS FOR TYPICAL APPLICATIONS AND ARE NOT EXCLUSIVE OR LIMITING. THE DESIGNER IS RESPONSIBLE FOR DEVELOPING SPECIFICATIONS FOR INDIVIDUAL PROJECTS AND SPECIFIC CONDITIONS.

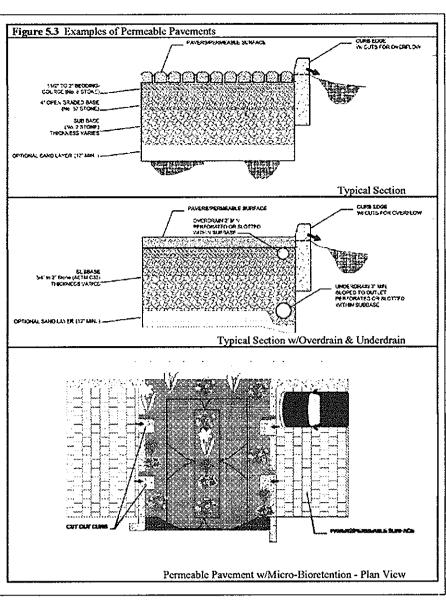
DESIGN THICKNESS - PERVIOUS CONCRETE APPLICATIONS SHALL BE DESIGNED SO THAT THE THICKNESS OF THE CONCRETE SLAB SHALL SUPPORT THE TRAFFIC AND VEHICLE TYPES THAT WILL BE CARRIED. APPLICATIONS MAY BE DESIGNED USING EITHER STANDARD PAVEMENT PROCEDURES (E.G., AASHTO, ACI 325.9R, ACI 330R) OR USING STRUCTURAL VALUES DERIVED FROM FLEXIBLE PAVEMENT DESIGN PROCEDURES. MIX & INSTALLATION - TRADITIONAL PORTLAND CEMENTS (ASTM C 150, C 1157) MAY BE USED IN PERVIOUS CONCRETE APPLICATIONS. PHOSPHORUS ADMIXTURES MAY ALSO BE USED. MATERIALS SHOULD BE TESTED (E.G., TRIAL BATCHING) PRIOR TO CONSTRUCTION SO THAT CRITICAL PROPERTIES (E.G., SETTLING TIME, RATE OF STRENGTH DEVELOPMENT, POROSITY, PERMEABILITY) CAN BE DETERMINED. AGGREGATE - PERVIOUS CONCRETE CONTAINS A UMITED FINE AGGREGATE CONTENT. COMMONLY USED GRADATIONS INCLUDE ASTM C 33 NO. 67 (3/4 IN. TO NO. 4), NO. 8 (3/8 IN. TO NO.16) AND NO. 89 (3/8 IN. TO NO.50) SIEVES, SINGLE-SIZED AGGREGATE (UP TO 1 INCH) MAY ALSO BE USED. WATER CONTENT - WATER-TO-CEMENT RATIOS BETWEEN 0.27 AND 0.30 ARE USED ROUTINELY WITH PROPER INCLUSION OF CHEMICAL ADMIXTURES. WATER QUALITY SHOULD MEET ACI 30A. AS A GENERAL RULE, POTABLE WATER SHOULD BE USED ALTHOUGH RECYCLED CONCRETE PRODUCTION WATER MEETING ASTM C 94 OR AASHTO M 157 MAY ALSO BE USED.

ADMIXTURES - CHEMICAL ADMIXTURES (E.G., RETARDERS OR HYDRATION-STABILIZERS) ARE USED TO OBTAIN SPECIAL PROPERTIES IN PERVIOUS CONCRETE. USE OF ADMIXTURES SHOULD MEET ASTM C 494 (CHEMICAL ADMIXTURES) AND ASTM C 260 (AIR ENTRAINING ADMIXTURES) AND CLOSELY FOLLOW MANUFACTURER'S BASE COURSE - THE BASE COURSE SHALL BE AASHTO NO. 3 OR 4 COURSE AGGREGATE WITH AN ASSUMED OPEN PORE SPACE OF 30% (n=0.30). 2. PERMEABLE INTERLOCKING CONCRETE PAVEMENTS (PICP)

PAVER BLOCKS - BLOCKS SHOULD BE EITHER 3 1/8 IN. OR 4 IN. THICK, AND MEET ASTM C 936 OR CSA A231.2 REQUIREMENTS. APPLICATIONS SHOULD HAVE 20% OR MORE (40% PREFERRED) OF THE SURFACE AREA OPEN. INSTALLATION SHOULD FOLLOW MANUFACTURER'S INSTRUCTIONS, EXCEPT THAT INFILL AND BASE COURSE MATERIALS AND DIMENSIONS SPECIFIED IN THIS APPENDIX SHALL BE FOLLOWED. INFILL MATERIALS AND LEVELING COURSE - OPENINGS SHALL BE FILLED WITH ASTM C-33 GRADED SAND OR SANDY LOAM. PICP BLOCKS SHALL BE PLACED ON A ONE-INCH THICK LEVELING COURSE OF ASTM C-33 SAND. BASE COURSE - THE BASE COURSE SHALL BE AASHTO NO. 3 OR 4 COURSE AGGREGATE WITH AN ASSUMED OPEN PORE SPACE OF 30% (n=0.30).

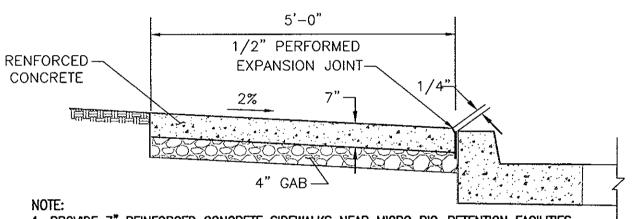
REINFORCED GRASS PAVEMENT (RGP) - WHETHER USED WITH GRASS OR GRAVEL, THE RGP THICKNESS SHALL BE AT LEAST 1-3/4" THICK WITH A LOAD CAPACITY CAPABLE OF SUPPORTING THE TRAFFIC AND VEHICLE TYPES THAT WILL BE CARRIED.





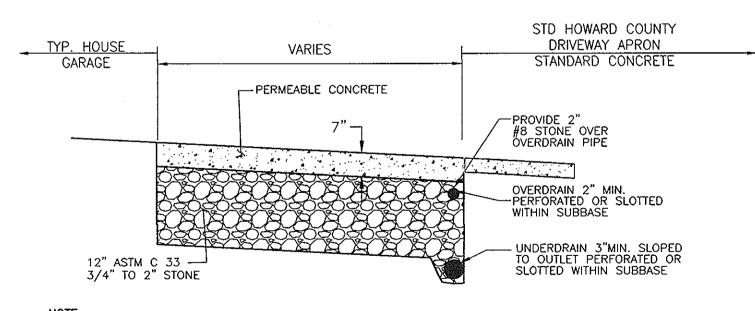
MDE DETAIL A-2

	STORMWATER PRAC	MANA TICES	GEMEN	Т
LOT NUMBER	LOI		DISCONNECTION OF ROOFTOP RUNOFF	RAINWATER HARVESTING
		A-2	N-1	M-1
1	2612 TOBY LANE	X	3	2
2	2616 TOBY LANE	X	3	2
3	2620 TOBY LANE	Х	3	2
4	2624 TOBY LANE	X	2	2
5	2628 TOBY LANE	X	2	2
6	2632 TOBY LANE	X	3	2
7	2636 TOBY LANE	X	2	2
8	2640 TOBY LANE	X	3	2
9	2644 TOBY LANE	X	4	2
10	2648 TOBY LANE	X	3	2
11	2627 TOBY LANE	X	4	2
12	2623 TOBY LANE	X	4	2
13	2619 TOBY LANE	X	2	2
14	2615 TOBY LANE	X	3	2
15	2611 TOBY LANE	X	4	2
16	9108 LUCYS OVERLOOK WAY	Х	3	2
17	9112 LUCYS OVERLOOK WAY	X	4	2
18	9116 LUCYS OVERLOOK WAY	X	2	2
19	9120 LUCYS OVERLOOK WAY	X	1	2
20	9124 LUCYS OVERLOOK WAY	Х	3	2
21	9117 LUCYS OVERLOOK WAY	X	3	2
22	9113 LUCYS OVERLOOK WAY	X	4	2
23	9109 LUCYS OVERLOOK WAY	X	3	2
24	9105 LUCYS OVERLOOK WAY	×	4	2
25	9101 LUCYS OVERLOOK WAY	X	3	2



1. PROVIDE 7" REINFORCED CONCRETE SIDEWALKS NEAR MICRO BIO-RETENTION FACILITIES. 2. AN UNDERDRAIN SHOULD BE INSTALLED TO DAYLIGHT IN TO THE FACE OF CURB ON BOTH SIDES AT SUMPS WHERE THE PERVIOUS SIDEWALK TRANSITIONS TO STANDARD SIDEWALK.

> **DETAIL - TRAFFIC BEARING CONCRETE SIDEWALK** NOT TO SCALE

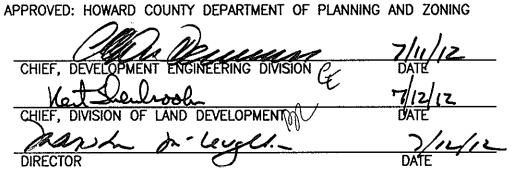


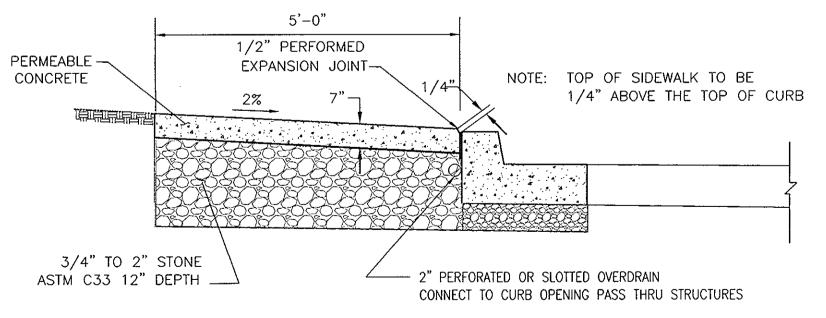
- 1. PAVEMENT CROSS SECTION TO BE CONFIRMED BY GEOTECHNICAL ENGINEER 2. UNDERDRAIN SHALL BE LOCATED SUCH THAT IT CAN DAYLIGHT TO THE CURB INTO A BIO-RETENTION FACILITY OR TO THE REAR OF THE LOT, AS SHOWN ON SHEETS 5-7
- 3. OVERDRAIN SHALL COMBINE WITH UNDERDRAIN OR DAYLIGHT AS DETAILED FOR UNDERDRAIN, SEE NOTE 2.

DETAIL - PERMEABLE CONCRETE DRIVEWAY - 5% OR LESS

TO BE DETERMINED BY GEOTECHNICAL ENGINEER ONSITE.

NOT TO SCALE ALL PERMEABLE CONCRETE THICKNESS, MIX AND SUB-BASE





DETAIL - PERMEABLE CONCRETE WALK

SIDEWALK TO BE SCRIBED IN 5'-O" MAXIMUM SQUARES. EXPANSION JOINTS ACROSS THE SIDEWALK NOT TO BE MORE THAN 15' APART. 1/2" PREFORMED EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 1/4" BELOW SURFACE 4. WHEN SIDEWALK ABUTS CURB, SIDEWALK SHALL BE 1/4' ABOVE CURB WITH 1/2" PREFORMED EXPANSION JOINT BETWEEN SIDEWALK AND CURB. 5. ON LONGITUDINAL SIDEWALK GRADES OF 5 OR GREATER. A CONCRETE HEADER. 6 THICK AND 6" DEEP BELOW THE NORMAL 4" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 48 FEET. THE HEADERS SHALL BE PLACED AT THE EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK. \ SIDEWALK WIDTH ADJACENT TO CURB SHALL BE 5 MINIMUM EXCEPT SIDEWALK ADJACENT TO CURB IN CUL-DE-SAC BULBS MAY BE 4'-O WIDE. CEMENT SHALL BE PER AASHTO M85 AIR ENTRAINING - TYPE II PORTLAND TYPE, GRAY COLOR. MIX AND DELIVER CONCRETE IN ACCORDANCE WITH ASTM C94/C94M, OPT:ON C WITH THE FOLLOWING CRITERIA: TENSILE STRENGTH: 500 PSI AT 28 DAYS, COMPRESSIVE STRENGTH: 3000 PSI AT 28 DAYS, UNIT

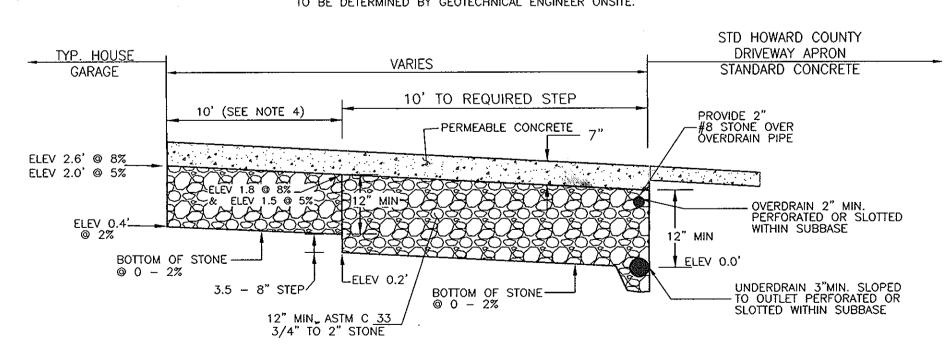
WEIGHT: 130 POUNDS/CF. STOEN SHALL BE NO. 8 COARSE AGGREGATE PER ASTM C33.

8. CONCRETE MIX SHALL BE DESIGNED BY GEO TECHNICAL CONSULTANT.

9. BASE BELOW THE CURB SHALL CONSIST OF GRADED AGGREGATE BASE(GAB).

DETAIL - PERMEABLE CONCRETE DRIVEWAY - 5% TO 8% (MAX)

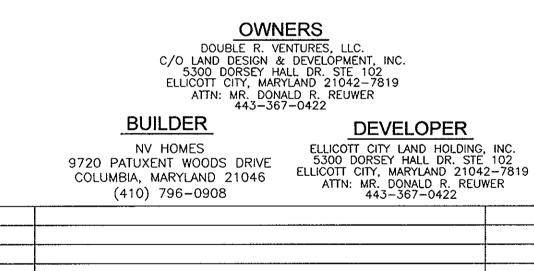
ALL PERMEABLE CONCRETE THICKNESS, MIX AND SUB-BASE TO BE DETERMINED BY GEOTECHNICAL ENGINEER ONSITE.



1. PAVEMENT CROSS SECTION TO BE CONFIRMED BY GEOTECHNICAL ENGINEER 2. UNDERDRAIN SHALL BE LOCATED SUCH THAT IT CAN DAYLIGHT TO THE CURB INTO A BIO-RETENTION FACILITY OR TO THE REAR OF THE LOT, AS SHOWN ON SHEETS 5-7

- 3. OVERDRAIN SHALL COMBINE WITH UNDERDRAIN OR DAYLIGHT AS DETAILED
- FOR UNDERDRAIN, SEE NOTE 2. 4. ABOVE EXAMPLE ASSUMES 20' DRIVEWAY (HOUSE TO RIGHT--OF--WAY / STANDARD DRIVEWAY APRON), 8% PERM. SURFACE AND 2% BOTTOM STONE

5. THIS SDP WAS PREPARED WITH GENERIC HOUSE BOXES FOR HOUSE SITING PURPOSES. FOR DRIVEWAYS GREATER THAN 8% UPON FINAL MODEL DETERMINATION, ALTERNATIVE STORMWATER MANAGEMENT MEASURES SHALL BE PROVIDED



DATE REVISION SITE DEVELOPMENT PLAN **MISCELLANEOUS & STORMWATER MANAGEMENT** NOTES & DETAILS

> MOUNT HEBRON OVERLOOK LOTS 1-25

PARCELS 77, 78 & 416 TAX MAP 17 GRID 16,17 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND PREVIOUS SUBMITTALS: F-87-100, ECP-10-013, CONT. #14-4684-D, SP-10-007, PB-389





CHECKED BY: SCALE:

ROFESSIONAL CERTIFICATE I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARTIAND, LICENSE NO. 21438 EXPIRATION DATE: 12-16-2012